

CHAMBERS'S JOURNAL

OF
POPULAR

LITERATURE, SCIENCE, AND ART

Fifth Series

ESTABLISHED BY WILLIAM AND ROBERT CHAMBERS, 1832

No. 539.—VOL. XI.

SATURDAY, APRIL 28, 1894.

PRICE 1½d.

THE ROMANCE OF ORCHID-COLLECTING.

SOME FACTS ABOUT A FASHIONABLE CRAZE.

THERE is no real justification for surprise at the sometimes fabulous prices paid for Orchids. The cost of obtaining them is so great, both in money and in human life, that the wonder really is they are so cheap. And some orchids are cheap. You can stock a greenhouse with specimens of a hundred varieties bought at an average of half-a-crown apiece. But you can also spend as many guineas as there are days in the year on one ugly little bulb which is the sole representative of a new species or variety; or which is a departure from the established type of a known variety, either in colour or in some other detail. These are the orchids which daring men seek in almost unknown regions. The adventures attending the search would fill many books. Generally Germans, but sometimes Frenchmen or Englishmen, the collectors must have the patience of Job, the courage of Nelson, the lingual fluency of a courier, and the knowledge of a professor of science; combined with power to endure years of hardship.

Some years ago, a collector for an English firm was sent to New Guinea to look for a *Dendrobium*, then very rare. He went to the country, dwelt among the natives for months, faring as they fared, and living under very trying conditions, and he found about four hundred of the plants. He loaded a little schooner with them; but he put into a port in Dutch New Guinea, and the ship was burnt to the water's edge. He was ordered to go back for more, and he did. He found a magnificent collection of the orchids in a native burying-ground, growing among exposed bones and skulls. After much hesitation, the natives allowed him to remove the orchids, some of them still in the skulls, and sent with the consignment a little idol, to watch over the spirits of the departed. Little wonder that

these plants sold at prices ranging from five up to twenty-eight guineas each.

The dangers of the collector's task are terrible. Eight naturalists seeking various specimens in Madagascar once dined at Tamatave, and in one year after there was but a single survivor. Even this favoured person was terribly afflicted, for, after a sojourn in the most malarious swamps, he spent twelve months in hospital, and left without hope of restored health. Two collectors seeking a single plant died one after the other of fever. A collector detained at Panama went to look for an orchid he had heard of; and the Indians brought him back from the swamps to die. A man who insulted a Madagascar idol was soaked with paraffin by the priests and burnt to death. Mr Frederick Boyle shows that these dangers must be encountered invariably, if rare or new orchids are to be found, for he speaks of one which 'clings to the very tip of a slender palm in swamps which the Indians themselves regard with dread as the chosen home of fevers and mosquitoes.'

And the difficulties of the work are as great as its dangers. One collector was known to wade up to his middle in mud for a fortnight seeking for a specimen of which he had heard; another lived among Indians for eight months, looking in untracked forests for a lost variety. To obtain the orchids which grow on trees, the collector must hire a certain area of woodland with the right to fell the timber. The natives cannot be trusted to climb to the summits and gather the plants, and the collector cannot spare the time. So the wasteful plan of felling the trees is adopted; natives are employed to do the work, and the collector gathers his specimens from the fallen trunks. This, however, generally takes place far inland; the plants have then to be brought home. In one case they have to be carried six weeks on men's backs from the mountains to the Essequibo River; then carried six weeks in canoes, with twenty portages to Georgetown;

then to England over the ocean. Mr Boyle talks of a journey to the Roraima Mountain as quite easy travelling, yet it involves thirty-two loadings and unloadings of cargo; and in another direction 'one must go in the bed of a torrent and on the face of a precipice alternately for an uncertain period of time, with a river to cross almost every day.' Moreover, after all this trouble, the specimens often die on the journey, and the speculator has to risk the loss of one thousand pounds on a single cargo. What wonder that orchids are often dear?

Yet it is not so much the difficulty and danger which make them dear as rarity or peculiarity. Amongst a lot of the commonest orchids, some years ago, was found a plant similar to the rest in every characteristic except the colour of its stem, which was green instead of brown. When it flowered, the bloom should have been green; but it was golden, and the plant became in consequence practically priceless. It was divided into two parts, and one was sold to Baron Schröder for seventy-two guineas; the other to Mr Measures for one hundred guineas. This latter piece was several times divided, selling for one hundred guineas each time; but Baron Schröder's piece was never mutilated, and is now worth one thousand guineas! It would bring that sum, say the authorities, in the public saleroom. The good fortune of orchid buyers is sometimes remarkable. Bulbs which have not flowered, and give no sign of peculiarity, are often treasures in disguise. An amateur once gave three francs on the Continent for an *Odontoglossum*; it proved to be an unknown variety, and was resold for a sum exceeding one hundred pounds. Another rarity, bought with a lot at less than a shilling each, was resold for seventy-two guineas to Sir Trevor Lawrence, who has one of the finest collections, if not the finest, in England. A *Cattleya*, developing a new and beautiful flower, at once advanced in value from a few shillings to two hundred and fifty guineas; it was afterwards sold in five pieces for seven hundred guineas. Simply because its flower has proved to be white instead of the normal colour, two hundred and eighty guineas have been given for a *Cattleya*; and hundreds of guineas are available at this present moment over and over again for rare or extraordinary orchids either in private collections or in the market. A plant no bigger than a tulip bulb has been sold for many times its weight in gold; and 'a guinea a leaf' is a common, and often inadequate, estimate of the worth of rarities.

Only quite recently there was something in the nature of a pilgrimage of orchidists to the hothouses of Messrs Sander & Co., of St Albans, where a wonderful new orchid was on view. It is named '*Miltoniopsis Bleni Nobilus*,' and carried sixteen blooms, each nearly five inches in diameter. The colour is a flesh white, two rose wings of colour spreading laterally, and in the centre of each blossom is a blotch of cinnamon tint with radiating lines. But it is altogether indescribable in the exquisite beauty of its hues. Nature has rarely been so lavish as over this gem. It is the newest and probably the most magnificent of all orchids.

The orchid mania is not diminishing; on the contrary, it is more active now than ever it was. In spite of the constant risk of loss, and the inevitable difficulties and dangers of the enterprise, one nurseryman in this country devotes himself entirely to the orchid trade. He deals in nothing but orchids, and trusts to the high price which the collectors will pay for a rarity to recompense him for the expenses of the collector's journey, and the losses which occur in the transfer of the plants from one continent to another. And there must be rarities for many years to come; because, although there are some two thousand varieties of orchids in cultivation, it is estimated that there are probably ten thousand in existence, could they all be found.

AT MARKET VALUE.*

CHAPTER XVIII.—PRECONTRACT OF MATRIMONY.

THAT night was the most eventful of Mr Reginald's life. For some weeks beforehand, indeed, he had lived in a perfect ferment of feverish excitement, intending, in his own expressive dialect, to 'pull off a double coup' on the day when Canterbury Bell provided him at one stroke with a colossal fortune. To say the truth, he held in his pocket, against this foregone contingency, a most important Document, which he designed to pull forth and exhibit theatrically to the obdurate Florrie at such a dramatic moment of triumph that even Florrie herself would have nothing left for it but to throw 'overboard incontinently the cavalry officer, and fly forthwith to love in a cottage with her faithful admirer. Mr Reginald had planned this all out beforehand in the minutest detail; and he had so little doubt of Canterbury Bell's ability to land him at once in fame and fortune, that he pulled forth the Document many times during the course of the day and read it through to himself once more with the intensest satisfaction.

Still, it's hard to wait for hours, slaving and toiling in an office in the City, when you know full well—on the unimpeachable authority of a private tip—that wealth and immunity are waiting for you all the while—to a moral certainty—at a bookmaker's at Newmarket. But necessity knows no law; and Mr Reginald nathless so endured till five in the evening. By that hour he had reached the well-known office in the Strand where he was wont to await the first telegrams of results from the racecourses of his country. As he approached those fateful doors, big with hope and apprehension, a strange trembling seized him. People were surging and shouting round the window of the office in wild excitement. All the evil passions of squalid London were let loose there. But Mr Reginald's experienced eye told him at once the deadly news that the favourite must have won—for the crowd was a joyous one. Now, the crowd in front of a sporting paper's office on the evening of a race day is only jubilant when the favourite has won; otherwise, of course, it stands morose and silent before

* Copyright reserved in the United States of America.

the tidings of its failure. But Canterbury Bell was what Mr Reginald himself would have described in the classic tongue of the turf—the muddy turf of Fleet Street—as ‘a rank outsider,’ for it is only by backing a rank outsider at heavy odds, ‘on unexceptionable information,’ that you can hope to haul in an enormous fortune at a stroke, without risking a corresponding or equal capital to start with. So the peans of delight from the crowd that danced and yelled outside the office of the sporting paper made Reggie’s heart sink ominously. Could his tipster have played him false? It looked very much like it.

Worse and worse, as he drew nearer he could catch the very words of that jubilant cry—‘The Plunger! The Plunger!’ A hundred voices echoed it wildly to and fro in their excitement. The whole air was fairly rent with it, ‘The Plunger! The Plunger!’

Now the Plunger was the name of that wretched horse, the favourite! Reggie came up with bated breath. His heart stood still within him. ‘What’s won?’ he asked a costermonger who was shouting with the rest. And the man, giving him a cool stare, made answer at once: ‘Wy, can’t you see it up there, you image? The Plunger! The Plunger!’

Reggie raised his eyes at once to the big lime-lit transparency on the front of the sign-board, and read there his doom. It *was* the Plunger!

‘And Canterbury Bell?’ he gasped out, half clutching the man for support.

‘Canterbury Bell!’ the costermonger responded with an instinctive gesture of profound contempt. ‘You haven’t gone and risked yer money on Canterbury Bell, ave yer? Wy, Canterbury Bell was never in it at all. I could’a told you that much if you’d ‘a axed me aforehand. Canterbury Bell’s a bloomin’ fraud. She wan’t meant to stay. She wan’t never so much as in it!’

Reggie’s brain reeled round. With a sickening sense of disillusion and disappointment, he clutched the Document in his pocket. Then all was up. He could never marry Florrie. The bubble had burst. He had chucked away his bottom dollar on a ‘blooming fraud,’ as the costermonger called it. Life was now one vast blank. He didn’t know where to turn for consolation and comfort.

His first idea, in fact, was to slink off, unperceived, and never keep the engagement with Florrie at all. What use was he now to Florrie or to anybody? He was simply stone-broke. Not a girl in the world would care for him. His second idea was to fling himself forthwith over Waterloo Bridge; but from that heroic cowardice he was deterred by the consideration that the water was cold, and if he did, he would probably drown before any one could rescue him, for he was a feeble swimmer. His third and final idea was to go and tell Florrie every word of what had happened, and to throw himself, so to speak, on her generosity and her mercy.

Third ideas are best. So he went, after all, to Rutland Gate, much dispirited. A manservant in a mood as dejected as his own opened the front door to him. Was Miss

Clarke at home? Yes, the servant replied still more dejectedly than ever; if he liked, he could see her. Reggie stepped in, all wonder. He rather fancied that man-servant, too, must have lost his all through the astounding and incomprehensible victory of the Plunger.

In the drawing-room, Florrie met him, very red as to the eyes. Her mien was strange. She kissed him with frank tenderness. Reggie stared wider than ever. It began to strike him that all London must have backed Canterbury Bell for a place, and gone bankrupt accordingly. Argentines were nothing to it. He had visions of a crash on Change to-morrow. But Florrie held his hand in hers with genuine gentleness. ‘Well, you’ve heard what’s happened!’ she said; ‘you dear! and still you come to see me!’

‘What? The Plunger?’ Reggie ejaculated, unable to realise any save his own misfortune.

‘The Plunger!’ Florrie repeated in a vague sort of reverie. ‘I’m sure I don’t know what you mean. It’s this about poor Papa. Of course you’ve heard it.’

‘Not a word,’ Reggie answered with a pervading sense that misfortunes, like twins, never come single. ‘Has anything dreadful happened?’

‘Anything dreadful?’ Florrie echoed, bursting at once into tears. ‘Oh Reggie, you don’t know! Everything dreadful! everything!’ And she buried her fluffy head most unaffectedly in his shoulder.

Reggie was really too chivalrous a man, at such a moment, when beauty was in distress, to remember his own troubles. He kissed away Florrie’s tears, as a man feels bound to do when beauty flings itself on him, weeping; and as soon as she was restored to the articulate condition, he asked, somewhat tremulous, for further particulars. For ‘everything,’ though extensive enough to cover all the truth, yet seems to fail somewhat on the score of explicitness.

‘Look at the paper,’ Florrie cried with another burst, all sobs. ‘Oh Reggie, it’s too dreadful. I just *couldn’t* tell you it.’

She handed him an evening journal as she spoke. Reggie glanced at the place to which her plump little forefinger vaguely referred him. The words swam before his eyes. This was truly astonishing. ‘Arrest of the Well-known Money-lender, Mr “Spider” Clarke, for Fraud and Embezzlement. Alleged Gigantic System of Wholesale Forgery. Liabilities, Eighty Thousand; Probable Assets, Nil. The Spider’s Web, and the Flies that filled it!’

Reggie read it all through with a cold thrill of horror. To think that Florrie’s Papa should have turned out a fraud, only second to Canterbury Bell, in whom he trusted! It was terrible, terrible! As soon as he had read it, he turned with swimming eyes of affection to Florrie. His own misfortunes had put him already into a melting mood. He bent down to her tenderly. He kissed her forehead twice. ‘My darling,’ he said gently, with real sympathy and softness, ‘I’m so sorry for you! so sorry! But, oh Florrie, I’m so glad you thought of sending for me.’

Florrie drew out a letter in answer from her pocket. ‘And just to think,’ she cried

with flashing eyes, handing it across to him with indignation; 'that dreadful other man—before the thing had happened one single hour—the hateful, hateful wretch—he wrote me that letter. Did ever you read anything so mean and cruel? I know what to think of him now, and, thank goodness, I've done with him!'

Reggie read the letter through with virtuous horror. As poor Florrie observed, it was a sufficiently heartless one. It set forth, in the stiffest and most conventional style, that, after the events which had happened to-day before the eyes of all London, Miss Clarke would of course recognise how impossible it was for an officer and a gentleman and a man of honour to maintain his relations any longer with her family; and it therefore begged her to consider the writer in future as nothing more than hers truly,
PONSONBY STRETFIELD BOURCHIER.

Reggie handed it back with a thrill of genuine disgust. 'The man's a cad,' he said shortly; and, to do him justice, he felt it. Meanness or heartlessness of that calculated sort was wholly alien to Reginald Hesslegrave's impulsive nature.

'Thank you, Reggie,' Florrie said, drawing nearer and nearer to him. 'But you know, dear, I don't mind. I never cared one pin for him. After the first few weeks, when I thought of him beside you, I positively hated him. That's the one good thing that has come out of all this trouble; he won't bother me any more; I've got fairly rid of him.'

Reggie pressed her to his side. 'Florrie dear,' he whispered chivalrously, 'when you talk like that, do you know, you almost make me feel glad all this trouble has come—if it has had the effect of making us draw closer to one another.'

And that it had that effect at that present moment was a fact just then visibly and physically demonstrable.

Florrie laid the frizzy curls for a minute or two on his shoulder. In spite of her misfortunes, she was momentarily quite happy. 'I always loved you, Reggie,' she cried; 'and I can't be sorry for anything that makes you love me.' And she nestled to his bosom with the most confiding self-surrender.

This confidence on Florrie's part begot in return equal confidence on Reggie's. Before many minutes, he had begun to tell that innocent, round-faced girl how narrowly he had just missed a princely fortune, and how opulent he would have been if only Canterbury Bell had behaved as might have been expected of so fine a filly. 'And it was all for you, Florrie,' he said ruefully, fingering the Document all the while in the recesses of his pocket. 'It was all for you, dear one! I thought I should be able to come round to you to-night in, oh such triumph! and tell you of my good-luck, and ask you to throw that vile Bouchier creature overboard for my sake, and marry me offhand—because I so loved you. And now it's all gone smash—through that beastly wretch, the Plunger.' 'Did you really think all that?' Florrie cried, looking up at him through her tears, and smiling confidently.

'Do you doubt it?' Reggie asked, half drawing the Document from the bottom of his pocket.

'N-no, darling, I don't exactly doubt it,' Florrie answered, gazing still harder. 'But I wonder . . . if you say it just now, so as to please me.'

Reggie's time had come. Fortune favours the brave. He held forth the Document itself in triumph at the dramatic moment. After all, it had come in useful. 'Read that!' he cried aloud in a victorious voice, like a man who produces irrefragable evidence.

Florrie gazed at the very official-looking paper in intense surprise. She hardly knew what to make of it. It was an instrument signed by the Right Reverend Father in God, the Archbishop of Canterbury; and it set forth in fitting terms his archiepiscopal blessing upon a proposed union between Reginald Francis Hesslegrave, Bachelor, of the Parish of St Mary Abbott's, Kensington, and Florence Amelia Barton Clarke, Spinster, of the Parish of Westminster.

Florrie gazed at it, all puzzled. 'Why, what does this mean, dearest?' she faltered out with emotion. 'I don't at all understand it.'

That was a proud moment for Reggie—about the proudest of his life. 'Well, it's called a special license, dear,' he answered, bending over her. 'You see, Florrie, I took it for granted Canterbury Bell was safe to win—as safe as houses—so I made up my mind to try a coup beforehand. I went to the surrogate and swore a declaration'—

'A what?' Florrie exclaimed, overcome by so much devotion.

'A declaration,' Reggie continued. 'Don't you know, a sort of statement that we both of us wished to get married at once, and wanted a license; and here the license is; and I thought, when Canterbury Bell had won, and I was as rich as Cæsar, if I brought it to you, just so, you'd say like a bird: "Never mind my people; never mind Captain Bouchier. I've always loved you, Reggie, and now I'm going to marry you." But that beastly fool the Plunger plunged in and spoiled all. If it hadn't been for him, you might perhaps have been Mrs Reginald Hesslegrave to-morrow morning. Mrs Reginald Hesslegrave is a first-rate name, darling.'

Florrie looked up at him confidently. She recognised the adapted quotation from a well-known poet. 'And it's no good now,' she said plaintively, 'since the Plunger put a stop to it!'

A gleam of hope dawned in Reggie's eyes. He was in a lover's mood, all romance and poetry. 'Well, the license is all right,' he said, taking Florrie's hand in his and smoothing it tenderly. 'The license is all right, if it comes to that. There's no reason, as far as the formalities go, why I shouldn't marry you, if you will, to-morrow morning.'

'Then what stands in the way?' Florrie inquired innocently.

'You,' Reggie answered at once with a sudden burst of gallantry. 'You yourself entirely. Nothing else prevents it.'

Florrie flung herself into his arms. 'Reggie, Reggie,' she sobbed out, 'I love you with all my heart. I love you! I love you! You're the only man on earth I ever really loved.'

With you, and for your sake, I could endure anything—anything.'

Reggie gazed at her, entranced. She was really very pretty. Such eyes! such hair! He felt himself at that moment a noble creature. How splendid of him thus to come, like a modern Perseus, to the rescue of beauty—of beauty in distress at its hour of trial! How grand of him to act in the exact opposite way from that detestable Bourchier creature, who had failed at a pinch, and to marry Florrie offhand at the very time when her father had passed under a serious cloud, and when there was some sort of merit in marrying her at once without a penny of expectations! Conduct like that had a specious magnanimity about it which captivated Reginald Hessegrave's romantic heart; the only point in the case he quite forgot to consider was the probability that Kathleen, unconsulted on the project, might be called upon to support both bride and bridegroom.

He clasped the poor panting little Decoy Duck to his bosom. 'Florrie dearest,' he murmured, 'I have nothing; you have nothing; we have both of us nothing. We know now it's only for pure, pure love we can think of one another. I love you. Will you take me? Can you face it all out with me?'

Florrie hid her face yet once more in Reggie's best white waistcoat. He didn't even stop to reflect how she tumbled it. 'Darling, darling,' she cried, 'how unselfish! how noble of you!'

Reggie drew himself up with an ineffable sense of having acted in difficult circumstances like a perfect gentleman. He was proud of his chivalry. 'Then to-morrow,' he said briefly, 'we will be married with this license, as the Archbishop directs, at St Mary Abbott's, Kensington.'

Florrie clung to him with all her arms. She seemed to have a dozen of them. 'Oh you dear!' she cried, overjoyed. 'And at such a moment! How grand of you! How sweet! Oh Reggie, now I know you are indeed a true gentleman.'

Reggie thought so himself, and stood six inches taller in his own estimation; though even before, Heaven had granted him a fairly good conceit of himself.

(To be continued.)

A ROYAL RESTING-PLACE.

DAYBREAK on a glorious March morning in North-western India. The clear blue of the glassy sky melts on the horizon into a tender blush of softest pink. Palm and peepul glitter with heavy beads of the drenching dew which bathes the dusty highway, whence green rice-fields extend to the sandy bed of the sacred Jumna. A tall crane, his dark form silhouetted against the brightening glow of dawn, stands fishing in the blue current, shrunk by winter drought; and gaily-clad natives dip brazen 'lotahs' in the stream, scattering the precious drops far and wide in the mystic incantations with which their ancient creed hallows the coming day. An intense hush lingers over the silent land; but as

the rosy eastern clouds deepen to crimson, and stretch like flaming wings across the sky, a faint indefinable sense of waking life stirs the solemn silence of the radiant dawn. A bright-eyed monkey throws a bunch of unripe nuts at the 'gharry,' as we pass under the overshadowing branch to which he clings with one wrinkled hand; white oxen draw creaking wagons across the verdant plain, and bronze-hued women with jewelled nose-rings, and arms laden with clanking bangles, leave palm-thatched huts to draw water from the well.

We halt before a noble red sandstone gateway in a huge machicolated wall, where a little town nestles under the shadow of the ruddy battlements. The business of daily life is already in full swing, and we are at once surrounded by a picturesque crowd, offering for sale amulets, charms, and mosaics, pictures of the famous Tomb we have come to see, and of the beauteous Queen who rests within it. Dewy wreaths of purple 'grave-flowers'—the common name of the Bougainvillea in India—are pressed upon us; but with the Taj Mahal as the goal of our journey, the parasitic town which has sprung up around it fails to interest us, although at any other time the brilliant colouring of the fantastic groups would be worthy of notice. For a moment we pause before the majestic portal, and look upward at the wreathing inscription in Persian character, which reminds us that 'Only the pure in heart shall enter the Garden of God.' These solemn words, which consecrate even the threshold of the outer courts surrounding the Taj Mahal, seem like a talisman which guards the sacred shrine of a deathless love from every profane and curious gaze.

As we pass into the shadowy gloom of the vaulted roof between the double arch, turret and watch-tower, pinnacle and cupola, rise on either side to accentuate the importance of the great memorial temple, to which this noble architectural group forms the mere outer porch and vestibule. Before us rise the green avenues of a grand and shadowy garden, a veritable Eastern paradise, full of dreamy coolness and repose. The freedom and space of woodland and wilderness combine with the highest degree of cultivation to produce a scene of unrivalled beauty. A dark aisle of towering cypresses extends for nearly a mile before us, framing a marble bank of clearest water, from which rises a long row of sparkling fountains, each one darting a slender jet high in air. On the farther side of each cypress wall, a broad road, shadowed by luxuriant foliage, ascends gradually to a marble terrace built round the central fountain half-way down the avenue, where vases of tropical flowers make a focus of gorgeous bloom. As we rest on the marble seats placed here as a halting-place for the pilgrims, even the exceeding beauty of woodland, lake, and fountain is at first but dimly realised, for at the end of the noble vista in front of us, on snowy marble terraces, rising tier above tier between the garden and the holy river, a glorious dome soars upward like a pearly cloud, its ethereal whiteness spiritualised into still more dream-like beauty by a faint rose-flush reflected from the morning sky. Arrowy shafts of ivory whiteness, and clustering cupolas like foam-bells tossed in mid-air, surround this

majestic vision, which suggests the evanescent loveliness of some atmospheric illusion. We might almost expect to see the cloudblike dome detach itself from the perforated marble arches of the main fabric, and mount upward to the blue heaven of which it seems a part.

Four sky-piercing minarets white as driven snow stand one at each corner of the spacious marble platform, to remind the pilgrim that the Taj Mahal is a place of perpetual prayer. This idea is enforced by the presence of an immense sandstone mosque on either side of the sacred temple of death; and the snowy purity of this crown and flower of Mogul art is emphasised by the ruddy domes and minarets which flank the white terraces on which it stands. As we approach the great flights of marble steps, a nearer view reveals the fact that dome and cupolas, walls and minarets, of the Taj Mahal are richly inlaid with an intricate mosaic of precious stones and costly marbles, which, instead of detracting from the general effect of dazzling whiteness, only enhance the almost transparent delicacy of the fairy fabric. Rock-crystal and coral, garnet and sapphire, amethyst and turquoise, gleam amid agate and cornelian, jasper and lapis-lazuli, from the many-coloured marbles which relieve the background of all-pervading white. Diamonds still glitter round the inaccessible heights of the dome, though many of the most valuable jewels were picked out of their settings by successive conquerors of Agra. The jewelled embroidery of the Taj is one of the most exquisite refinements of the art which, in obedience to Moslem creed, refrains from the exact representation of any natural object, while suggesting with marvellous fidelity every variety of tropical vegetation in a manner which indicates the spirit rather than the form of leaf and flower.

Let us pause outside the low doorway in the fretted arch which gives access to the shrine, and call to mind the love-story which it immortalises. The fairest queen of Mogul India sleeps beneath this mighty dome. Legends of her surpassing beauty and of the devoted love which has rendered the name of the Mogul Emperor, Shah Jehan, more famous than the memories of war and conquest, are still told to the traveller who visits the halls of the royal Zenana within the Fort of Agra. We should hardly look for the highest type of conjugal love in the union of an Eastern despot and his favourite wife; but 'the wind bloweth where it listeth,' and the divine fire, which with divine impartiality is sometimes bestowed like the sun and rain alike on just and unjust, was lit in the Mogul monarch's heart, raising him above the apparently insuperable barriers of creed and custom, and making him for all time a supreme example of constant affection.

The traditional portraits of Arjamund, his idolised Persian wife, convey the idea that some intangible charm of voice, manner, or smile must have stirred the statuesque repose of the delicate aquiline face which looks out at us with dark heavy-lidded eyes from a cloud of ebony hair roped with pearls. We can scarcely believe that the imperial Zenana with its galaxy of loveliness furnished no more brilliant type of beauty than that which belonged to 'The Exalted of the

Palace,' the chosen queen of the Emperor's heart and life, on whom he conferred this title of honour. The face of Arjamund expresses simplicity and sweetness; but the soft loveliness and tender colouring in no way resemble the darkly glowing beauty of the Hindu, or the rose and lily fairness of Georgian and Circassian. The union of Shah Jehan and his Persian bride was for many years like one long summer day of perfect happiness. The wealth and power of the Mogul Empire made the life of the Indian Court a gorgeous pageant, resembling a dream of Arabian Nights rather than the reality of an earthly kingdom; but the sun was sinking below the horizon: the myriad slaves who lived but to serve the Persian queen, the armies to whom her name was the watchword of victory, and the passionate devotion of the Emperor, were alike powerless before the Angel of Death. The dread fiat had gone forth, and with the submission of Oriental fatalism Shah Jehan bowed his head to the divine decree. His heart and thoughts were fixed henceforth upon the mysterious world whither the soul of Arjamund had fled, and one labour of love yet remained to be accomplished. The fabulous wealth and inexhaustible resources of the empire were put into immediate requisition, in order that the burial-place of this Queen of queens should immortalise her memory and her husband's love.

In 1630 A.D. the Tomb was begun; it is said to have occupied twenty thousand workmen for seventeen years, at the end of which it was completed at a cost of three millions sterling. India, China, Tibet, Arabia, and Persia were ransacked for the gems and marbles which formed the material of this temple of love and sorrow. Armed caravans, with their long trains of horses, camels, and elephants, crossed desert, river, and mountain frontier in every direction, laden with treasure from all the kingdoms of the East. Might was right in the days of Shah Jehan, and every disputed demand was enforced by fire and sword. Even the labour was forced, and the curtailment of the workmen's allowance of food resulted in frightful distress and mortality. The sacrifice of human life represented by the erection of the Taj Mahal casts the one dark shadow over the memories which it recalls. Even the architect was assassinated by imperial command, on the completion of the Tomb, as a precaution against any future repetition of the design which might hereafter detract from the unique glory of Arjamund's resting-place. The ideal love interwoven like a golden thread with the oppressive tyranny of Eastern despotism is a strange anomaly in the complex character of Shah Jehan. The room in the palace of Agra into which he was carried in his dying hours, in order that his last look might rest upon the finished beauty of the Taj, is still shown to the visitor. The arched window frames an exquisite view of the pearly dome and minarets rising from the shadowy trees which border the polished terraces laved by the blue Jumna. Across the sacred river which gives an additional sanctity to the spot, the Emperor was at length borne from the palace to the Tomb, where he rests by the side of Arjamund, 'The Exalted of the Palace,' whom in death he raised to a higher pinnacle of fame in the sight of a wondering world.

The narrow doorway, through which only one at a time can pass, prevents any unseemly crowding into the burial hall of the royal pair. A low chant from a dervish, prostrate before the perforated marble screens, like veils of filmy lace around the shrine, is repeated in a musical echo which loses itself in the vastness of the dome; otherwise, all is still. The shadowy heights of the soaring sphere rise in mysterious beauty above us, with the gleam of gems shining through the translucent whiteness of the milky marble. The same exquisite elaboration of geometrical and floral design is visible within as without. Legends and mottoes in Persian character, the sacred language of Mohammedanism, and the native tongue of the Mogul queen, encircle dome and walls with fantastic scroll-work. As the beautiful texts with their poetic imagery are translated to us, we recognise in their solemn words those great central truths which are not only the common property of Moslem and Christian, but which form the basis of every known religion that has ever crystallised itself into a creed. The contrast between time and eternity, the rewards of virtue, the joys of heaven, the vision of God, and man's dependence on the divine will, are all set forth in the sacred writings of ancient Persia. The beauty of scroll and flower and gem culminates round the shrine of Arjamund, the pearl which the casket contains, and the climax of its loveliness.

The marble network of screens around the Tomb is relieved by cornices and panels in a floral mosaic of many-coloured jewels. A white arch enriched with the same lavish decoration pierces the central screen, and rises high above it. On three mosaic steps which surmount a marble dais, inlaid with conventionalised jasmine, lily, and rose, stands the alabaster Tomb of the Mogul Queen, wreathed from base to summit with Persian scrolls and jewelled flowers. The intricate and delicate Persian characters seem the very poetry of calligraphy, and it would be difficult to find a more beautiful inscription than that which encircles the alabaster slab of the monument. The literal translation is said to give but a faint idea of the expressive power which belongs to the original language; but even in its English interpretation the legend retains a solemn and impressive beauty: 'This world is only a bridge; therefore cross over it, but build not upon it. The future is veiled in darkness, and one short hour alone is given thee. Turn every moment into a prayer, if thou wouldst attain unto heaven.'

In the stillness of the domed and vaulted hall, the words come to us like a message from the dead. A wandering breeze steals through the low doorway, and stirs the tendrils of the purple wreaths which lie on the steps of the Tomb. The melancholy call of the ringdoves in the banyan trees outside echoes softly through the marble silence, and the murmur of flowing water tells where the river hastens on its way to the thrice-holy spot where the sacred streams of Jumna and Ganges meet.

At the side of the central tomb, and raised a little higher from the floor to show that it is an Emperor's monument, is the plain marble sepulchre of Shah Jehan; but it is to the Queen that the post of honour belongs in this fair memorial temple. The entire subversion of

Moslem custom and precedent shows the intensity of the feelings which proved powerful enough to supersede them both. Western prejudice is such a frequent hindrance to any just appreciation of Oriental character, that even the identity of our common humanity is apt to be forgotten. The ideal love recorded on the marbles of the Taj Mahal is revealed to us as a heavenly inspiration, which attained to greater heights than those reached by the majority of mankind, even when raised by a purer creed and a higher moral code into a social atmosphere infinitely superior to that which environed the Mogul rulers of India. A pilgrimage to the Taj may still claim a sanctifying power, if, by widening Christian sympathies, it helps to bridge over the great mental chasm which yawns between East and West.

When we leave the shadowy twilight of the marble dome the sun has mounted far above the horizon, and the great building is sharply outlined against the blinding blue in a transfiguration of glittering light. Presently the yellow brooding heat of noon, which clings in almost tangible form to the sun-baked land, silences bird and breeze, and lies heavily on the drooping flowers. Shady paths thread the dense gloom of tropical woodlands to a kiosk, where the hot hours may be spent in the comparative coolness, more correctly described as modified heat, in this blazing March weather. As the afternoon shadows lengthen, the delicious breeze which precedes the sunset fans the garden with its balmy breath—the mournful cypresses, unstirred by the soft air which flutters palm frond and bay leaf, cast their slender shadows across the marble tank, and through the long vista the Taj appears under a new aspect. The Indian sky flames with amber and carmine glory, as though a vast conflagration were raging in the heights of heaven, and into this sea of fire the great dome floats like a sphere of burnished gold. Shaft and minaret are pointed with flame; and the snowy whiteness and solidity of the main building separate it from the visionary dome with the sharp line of demarcation which divides an earthly reality from a celestial dream. All too quickly the magical colouring fades, and the 'purple peace' of the Indian evening darkens over garden and Tomb; but the last and loveliest vision is yet to come.

As the yellow moon rises above the dark line of woods and throws a flood of light upon the Taj Mahal, the majestic fabric is idealised into the semblance of a spiritual creation, an aerial temple 'not made with hands'; the arched façade with its fretted marbles and delicate tracery shimmers with an opalescent gleam, as though it reflected light from within; minaret and pinnacle sparkle like spires of frosted silver; while suspended high above them, a diaphanous orb of silvery mist melts into the violet sky. The wonderful lightness of effect given by the elaboration of ornament is supposed to account for the mysterious moonlight beauty of the Taj. The ineffaceable impression produced by this mystical vision is deepened by the surrounding silence, only broken by the ripple of fountains and the low murmur of the Jumna.

Some dark figures crouch on the marble terraces, as they watch a twinkling lamp which floats far away on the silver tide, probably some

Hindu offering to the divinity of the holy river. As we leave the darkness of the garden and turn for a parting look at the fairest of earthly monuments, we accord to some words which originally referred to the founder of a Christian cathedral a wider application than they were intended to bear, for surely of the Mogul Emperor, Shah Jehan, we may say in the presence of the Taj Mahal:

He dreamed not of an earthly home,
Who thus could build.

A PRINCE'S LOVE-STORY.

CHAPTER IV.—CONCLUSION.

'COLONEL,' said the Prince impulsively, when the Herr Cancellarius was gone, 'the time is growing late; you are tired, and your family must be tired. Rest all of you in the castle to-night, and let me ride over the mountains and bring your daughter back.'

'Your Royal Highness,' said the Colonel, 'must permit the remainder of my family to return to the manse; and I myself, sir, her father, will ride over the mountains to bring my daughter back.'

'Colonel,' said the Prince, turning pettishly aside and kicking a footstool, 'you will not trust me.'

'It is a dangerous thing, your Royal Highness,' said the Colonel, 'for a young lady of middling station to be loved by a Prince.'

'At least,' said the Prince, 'you will permit me to ride with you.'

When the Herr Cancellarius returned with the knowledge which he had gleaned from the friends of his agents of the place to which Margaret had probably been taken, the Colonel and the Prince prepared to set out together in pursuit. First, the Colonel sent his wife and younger daughter home, and then he and the Prince mounted two sure-footed ponies and with a Highland guide set out over the mountain.

That midnight ride through the heather was embalmed in the memory of the two men. It made them better acquainted with each other than all former meetings, for by its means they got at the bones of each other's thoughts and views of life. The Colonel persistently told himself that his companion would be the finest, manliest, most desirable young man in the world, if only he were not a Prince, and he steadily refused to entertain any of the arguments with which the Prince urged his suit for the hand of Margaret. The Prince pleaded with all the fire and recklessness of youth; and the Colonel replied with all that wisdom of experience which hot youth regards as little as the thistle-down. This is the way their argument went on.

'I have understood, sir,' said the Colonel, 'that you are bound to the Princess Ernestine.'

'That was only a political arrangement,' said the Prince, 'which I can cast aside as easily as I throw away this cigar.'

'That is dangerous, sir,' said the Colonel: 'that might set the heather on fire.' And he dismounted and turned aside to tread the cigar

out. 'Permit me, sir,' said he, when he had remounted, 'to draw you a lesson from that. Your thoughtless repudiation of your engagement with the Princess Ernestine might cause a political conflagration. The king and the people of Starkenburg would take it as an insult. And permit me to point out that your royal rank entails upon you duties to your father and your country which do not fall upon a private gentleman.'

'I shall become a private gentleman,' answered the Prince. 'I shall give up my royal rank. What is my royal rank? I am second son only, and my royal rank only serves to wall me in and to control all my actions. I have no freedom. I command a regiment, it is true. But I could command a regiment better if I were only a Herr Graf, or a plain soldier like yourself, Colonel.'

'You cannot, sir,' maintained the Colonel, 'get away from the fact that you are bound by all kinds of subtle ties to your position, and the cutting of one or two of them would irritate instead of relieving you.'

'I shall cut them all. I shall withdraw from Pumpernickel and Germany altogether,' declared the Prince. 'I shall become an English subject; and I shall offer my sword to the Queen of England.'

'And ten years afterwards,' said the Colonel, 'you would bitterly regret it. No, sir; no woman is worth so much sacrifice. And I will not permit it for my daughter.'

While the Prince and the Colonel were gone upon their expedition of recovery, the Herr Cancellarius von Straubensee was not idle. He had been defeated in one skirmish, he told himself, but he had not yet been defeated on the main issue. He knew his Prince well enough to believe that he was capable of sending for a chaplain or minister as soon as the young lady was brought back, and he had no reason to think that the Colonel would oppose the marriage. As soon, therefore, as the supper party was got rid of, he made preparations for continuing his campaign hotly on the first line of its inception. This time he hesitated at nothing that would help him to success. He sat down and prepared a long telegram to Prince Hermann's father at Pumpernickel, begging him to exert all his influence to prevent so disastrous an alliance as that contemplated by the Prince. He wrote a telegram also to the Pumpernickel Minister in London, begging him anew to exert all his influence with the English Government. Then he had a nap in the library of an hour or so while a carriage was being got ready to drive him to Ballater to the telegraph office. His nap over and a morsel of food eaten, he set forth on his long drive through the still and dark hours of the early morning.

He insisted upon waking the telegraph official at Ballater before his time, and his messages were soon speeding over the telegraph wires by way of Aberdeen. His telegraphic business accomplished, he got fresh horses put into the carriage and galloped back to Balmoral; for, in his desperation, he had brought his astonished white head to disregard etiquette and to plead for the Queen's immediate assist-

ance. He was accorded the extraordinary favour of an audience as soon as Her Majesty had breakfasted. What passed at that audience I cannot tell, even if I would; but the Herr Cancellarius left the castle with victory shining on his jocund face, and a German Prince of the Queen's own immediate connection sitting beside him in the carriage. But his victorious career was not yet over; for the carriage turned aside from the direct way of its return to Ardnashiel, so that the Herr Cancellarius might deliver a message from the Queen to a Royal Prince, one of her own sons, who was staying in the neighbourhood; that message requested him also to join in remonstrance with Prince Hermann and to exert his influence. And all this to prevent a young man from marrying a young woman with whom he was in love!

'That,' said the Herr Cancellarius to the German Prince, as they whirled by the manse, 'is the house where the preposterous Colonel and his objectionable family dwell!'

The Colonel himself stood on the green before the door practising golf-strokes with his salmon gaff, as was usual with him after breakfast. He glanced towards the carriage as it drove by, but he recognised neither it nor its occupants. He was waiting for his daughter Margaret to wake, that he might have a long and serious talk with her. She had been found at a lonely shieling over the mountains in the charge of an old Highland dame. The Colonel had bargained with the Prince that no word of love should be uttered when she should be found; the Prince might explain that the letter had not been sent by him, and that her abduction was not arranged by him, but no more. In spite of that undertaking, however, the Prince found opportunity to whisper a word or two as they rode back all three through the heather. She was too weary and shaken with her strange adventure, however, to attend to the Prince's love-making. Her father was more considerate with her than the Prince, and did not trouble her with talk, except the most casual and ordinary, even when they were being driven from Ardnashiel to the manse. And therefore he was waiting, when the Herr Cancellarius drove by, to have that talk with his daughter which he had so patiently postponed. He was the more anxious to have it over, that the Prince before they parted had reiterated his intention of calling that day in the formal company of the Herr Cancellarius, and he wished to be sure of his position before he met them.

At length Margaret awoke. The Colonel heard her bell ring, and he went in and sent up word to her that he wished to have a talk with her immediately in her room.

'I daresay you guess, my dear,' said the Colonel, as soon as he had sat down, 'what I am in a hurry to talk with you about. Perhaps you heard the Prince say when we parted from him that he was coming here to-day?'

'I did hear him say something of the sort,' answered Margaret, with a blush.

'Well, I shall tell you plainly what his declared purpose is in coming: he means to formally ask your hand of me in marriage.'

'It is very early to talk of marriage, don't

you think, father,' said Margaret, with a rather forced laugh, 'before there has been any courting?'

'That, my dear,' said her father, 'is the way royal marriages are conducted.'

'Royal marriages!' exclaimed the girl.

'Don't let us fence, my dear,' said the Colonel, 'and waste time. Your marriage would be a royal marriage, if it came off.'

The girl emitted from her bright eyes a quick glance of surprise and disappointment. She was in that state of feeling which many young ladies find so delightful: she would and she wouldn't; she amused herself with the possibility of possessing a royal lover, and perhaps a royal husband, though, in her toying with the question, she had scarcely yet considered properly the issue of marriage; and therefore it caused her the cold shock of something real and fateful to hear her father hint a doubt of the likelihood of anything coming of all this.

'You will oblige me very much, Meg,' resumed her father, 'if you will tell me whether you have ever had any kind of spoken understanding with the Prince?'

Then Meg frankly told her father what had passed after the ducking in the river—that the Prince had said such and such things, evidently implying love, and that she had given one small answer and then made her escape.

'Hum!' said the Colonel, looking on her very seriously. 'So you do care for him?'

'I care for him a great deal, father,' answered Meg boldly: 'I cannot help it.'

'That's a pity,' said the Colonel simply, 'because nothing but vexation or disaster can come of it.'

Meg's face grew hard when he said that, and she scarcely heard him when he went over the old ground of the Prince's rank, and his engagement to the Princess Ernestine.

'To do him justice, however,' continued the Colonel, 'he declares he will cast off rank and everything only to have you.'

'He has said that?' exclaimed the girl. 'Then he is a lover in a hundred thousand!'

'But we cannot let him do anything of the kind,' said the upright, matter-of-fact Colonel. 'It would completely ruin him; he would for ever regret it.'

Margaret did not believe a word of that. The fire of devotion had seized both heart and head, and she heard no more that her father said. She only knew that before her father went, she had agreed to a formal refusal of the Prince's suit; but that did not trouble her, for her whole nature was glowing with the fire of devotion. As soon as her father was gone, she jumped up and hurriedly dressed, and sat down in the heat of her feeling and wrote a few lines at a great rate: 'DEAREST PRINCE—You are the noblest lover in the world. I have heard of your devotion, of all you would give up for me. I am yours. I have promised to refuse your formal offer of marriage. I must leave it to you to make that of no avail.—Yours ever, MEG HERRIES-HAY.'

She would not venture to read over what she had written lest she should be ashamed of it, or repent of it; she hurried it into an

envelope, and hastened forth with it in her pocket to find a messenger to bear it to its destination. By good luck she found the gillie who commonly attended her father and herself when they went fishing; he was wandering disconsolately around, 'looking at the weather,' as he said, being in want of an occupation; and he gladly undertook—for the handsome consideration which the young lady pressed into his hand—to carry the letter with all expedition; he knew, he said, where he could borrow a sheltie.

Meanwhile, Prince Hermann at Ardnashiel Castle was surrounded by great people, 'exerting their influence' to make him forego his intention of marrying the Colonel's daughter. There were the German Prince who was a near connection of the Queen; and the Royal Prince who was the Queen's own son; and another German Prince whom the Queen's own son had brought with him: all were 'exerting their influence' and bringing it to bear. Moreover, as the day wore on, there came by special messenger a telegram of dissuasive advice from the representative in London of His Majesty of Pumpnickel; and on the heels of that a telegram from His Majesty of Pumpnickel himself, containing German words of great length and angry and threatening import. While the Prince was thus sore bested, there was handed to him Margaret's impulsive note. He read it, and flushed with the triumph of love.

'Messieurs,' said he to the Princes who were exerting their influence, 'I have heard you patiently all the morning. I now ask one thing of you in return: come with me and see the lady.' They hesitated; they demurred. 'It is the only reply I can make at present to the interest you take in this matter, and to your kind professions of regard for me.'

Finally, they agreed to go to see Miss Herries-Hay. The four Princes set forth in one carriage, and the Herr Cancellarius and the Count von Saxe—for Prince Hermann insisted that they should go also—in another. The Herries-Hay family were sitting down to tea when the carriages appeared before the manse door.

'Gracious!' exclaimed Mrs Herries-Hay; 'who can all these be? I hope there are cups enough!'

Presently the door was opened, and the flustered servant ushered in Prince Hermann and his friends and attendants.

'Do not go away,' said the Prince to the servant.

The servant stood by the door, Colonel Herries-Hay—who recognised all the Princes—rose in bewilderment, and all the family wondered, but not for long. Prince Hermann stepped directly up to Margaret and took her hand. 'Permit me,' said he, looking round upon his friends and attendants, and including also the servant at the door in his glance, 'to introduce to you all—my wife!' There was a dead pause of astonishment and bewilderment. 'I know,' he continued, glancing at the Colonel in a flash of triumph, 'your Scottish law. I have declared your daughter my wife in the presence of witnesses, and so she is my wife!'

Margaret stood pale and trembling, with her hand in the Prince's. The Colonel recovered his wits the first of the bewildered company—at any rate he spoke first.

'It is nobly and generously intended, your Royal Highness,' said he; 'but I cannot permit it!' The Princes pricked their ears and gave all their attention. 'Whether your declaration is good in law or not, neither I nor my daughter can hold you bound by it.'—The Prince pressed Margaret's hand.—'On our conscience, we cannot, sir!'

'What does the lady say?' queried the Prince, the Queen's own son.

At that Margaret started and drew her hand from the Prince's, and looked about her. She paused and let her eyes drop before she replied. 'Let this unexpected declaration of Prince Hermann,' said she at length, 'go for nothing. But if he returns at the end of two months and claims me as his wife, I shall not repudiate him.'

In two months Prince Hermann returned as the Count von Angemar. He had dropped his royal rank, as he had declared he would; the offer of his sword had been accepted by the Queen of England; and he had become a British subject. He returned and claimed his betrothed. They were married in the little church adjoining the manse. Whether or not he regrets what he has done, it is yet too early to say.

GREAT GRIMSBY PONTOON.

GREAT GRIMSBY PONTOON, in the early morning hours of a midsummer day, presents a scene of unrivalled activity. Long before the sun rises, the Estuary of the Humber is all alive with myriad craft. Dingy funnelled steam-trawlers, their holds packed to overflowing with a multitudinous variety of fish, glide swiftly into dock; while in their wake come the sailing smacks, bearing a no less rich cargo. As the sun rises, the damp mists begin to disperse, and the ruddy sails lend colour to the picture; while the still dripping nets and slippery decks glisten by reason of the silvery fish-scales which cling to them like newly fallen snow-flakes. These vessels, innumerable as they seem to be, form but a part, and a very small part, indeed, of the great fishing fleet which makes Grimsby what it is, the largest and most important fishing port in the world. The fleet numbers 819 vessels all told, including 695 trawlers and 124 cod vessels, with a registered tonnage of 56,998, and carrying crews to the number of 4591 men, and with a fish-traffic of 73,650 tons per annum—a decided increase since the year 1854, when the tonnage was only 453. All these vessels, large and small, iron built or wooden, steam or sail, ply between Grimsby port and that happy hunting-ground of the North Sea fishermen, the Dogger Bank.

By six or seven A.M. the vessels have all come to anchor alongside the covered pier which stretches parallel with the shore for nearly a mile, and is known everywhere as the famous Grimsby Pontoon. Then the excitement of the day begins. The Pontoon loungers,

one and all, seem suddenly galvanised into preternatural activity, and with one bound the boats are boarded and the unloading begins. The fish have been carefully packed in ice compartments down in the hold; now they are unslipped, and are carried in boxes, tubs, and trolleys, to be laid in shining rows along the Pontoon. The casual visitor must keep a sharp lookout, otherwise he might easily take a header into the water, which at low tide is not exactly redolent of the briny ocean. It takes some experience to thread one's way between the jostling, pushing crowd, the slippery fish, and the huge blocks of ice and sacks of coal which stand in readiness for embarkation.

At length the fish are sorted; the small haddocks, plaice, and soles are laid in long rows, and are flanked by huge halibut and turbot, looking coldly conscious of their superiority to the smaller fry. It must be very ignominious to be landed together with the common herd and sold wholesale in a box; but quite otherwise is it to be a majestic halibut, whose mighty proportions tax the strength of a couple of men to lift on to the trolley and push along the Pontoon to the place for sale. Lemon-spotted fish are there in abundance, which the London fishmonger will possibly introduce to his customers as 'lemon soles,' but which the Grimsby fishermen call simply plaice.

The far-famed English sole, for which the New York epicure in vain sighs when at home, is growing fickle, and is forsaking its North Sea haunts, much to the sorrow of the Lincolnshire fishermen. Nevertheless, the North Sea sole holds its own in the market, and, not unlike certain warm-blooded animals, is living upon its reputation. The Grimsby soles are still to be seen in Billingsgate Market; but the majority of them have been caught in St George's Channel, and have made a slight detour via Grimsby, en route from Milford Haven to London, by this little strategy very much enhancing their market value.

Next the auction sale opens; and the busy crowd is reinforced by a more leisurely contingent, who can afford to saunter down by eight o'clock. The delicate but very definite lines which separate the aristocracy from the democracy in the fish-world are here emphasised. All fish, such as cod, halibut, and turbot, which have been caught by hook are put up to regular auction, and are honoured by the presence of a duly authorised auctioneer; but the humbler net-fish, which have been captured in shoals, are ignominiously sold 'downhill' by Dutch auction; while all cod, halibut, or turbot which have been so misguided as to slip through the meshes of the net must pay for their temerity by being bid for in the rapidly descending scale.

Long before noontide, the Pontoon has been cleared of fish; and the trucks which the railway company run down to the water's edge have been filled, and are speeding on their way, some to the Midlands, and others to the north country, but by far the larger proportion to the London markets.

Grimsby is indeed intersected by a perfect network of rails, and it owes its more recent

prosperity to the enterprise of the Manchester, Sheffield, and Lincolnshire Railway Company, who own the docks upon which the trade of the port depends, and who have done much to increase their area. Originally, the company built its line skirting the town; but the population has grown so rapidly, that now, in American fashion, the line runs through the very centre, scaring the nervous stranger who finds himself compelled every few minutes to traverse some level crossing. Much to the credit of the company, however, no public-house for the sale of intoxicants in any form is permitted upon the Pontoon. A bright, clean-looking Coffee Tavern does a brisk trade; and boys with baskets of substantial pies and other viands are in readiness the moment the boats come in to supply the fishermen at moderate prices.

During the summer season, many of the vessels remain at the Dogger Bank for as long as six weeks at a stretch; their catchings are transferred to 'carriers,' which ply to and from the shore at regular intervals. How grateful, then, to the eye and to the palate it must be, after these long weary weeks of rough ship fare, to find baskets of fruit and nicely cooked food brought down to the boats; and how much this excellent system must deter from drunkenness!

July is the busiest season of all, for the herring shoals from the northern seas are due off the Yorkshire and Lincolnshire coasts. The scene then becomes exceedingly animated, for the women and girls of the ports are called into requisition. They board the boats, and help the men to sort and salt and ice-pack the shiny, scaly herrings, which in a good season almost overwhelm the fisher folk, and the prompt disposal of which taxes their resources to the utmost.

The curing-houses used to be close by; but the wooden huts having been burnt down, brick buildings were erected; and here it is that the work of preparing and curing is almost entirely carried on by women and girls. Poverty Dock is the point to which all those vessels gravitate which stand in need of repairs. There 'Lord Salisbury' finds herself laid up side by side with 'Gladstone;' or 'Little Jessie' gently rocks alongside the 'Scottish Chief;' and 'Hebe' and 'Diana' lie close by 'Isaac Watts' or 'Oliver Cromwell.' Mythology, hymnology, history, and fiction are all pretty equally represented in the names with which the boats have been christened. The nets must also be seen to; and many of the men set to work to mend them as soon as the fish have been landed. There is indeed an amount and variety of work in this seafaring life of which the landsman is barely cognisant.

Certain fish make sad havoc with the nets; and during the winter months, and the autumnal and vernal equinoxes, when the winds and waves are most boisterous, many a boat comes back minus its nets, and alas! too, often boats and crew are also missing.

The old household system of net-making is a thing of the past; and just beyond the Pontoon, scores of women and girls are employed by the Salt and Tanning Company in their

long, narrow, and well-ventilated factory. Net-making, or 'net-braiding' as it is technically called, involves considerable muscular power; but it is clean and wholesome work; and the girls who, with a rapid jerk, knot the thick cord into its meshes, are as a rule tall and shapely, and endowed with more than the average good looks and health. It would be difficult to find a finer set of girls than these, as they sit or stand in long rows in their pretty cotton blouses, their neat skirts, and charmingly arranged hair.

In the summer, work is usually slack; but during the busy season, working by the piece from eight A.M. to five P.M., girls can earn from eight to eighteen shillings per week according to skill. And it is pleasing to find here an airy, comfortable, furnished dining-room, provided with excellent culinary conveniences.

The Pontoon with its surroundings, although of chief interest to the passing visitor, forms but a small portion of the port, which from its Royal, its Union, and its Alexandra Docks, despatches a fleet of fourteen powerful steamers to Hamburg, Antwerp, Rotterdam, and many other of the principal European ports.

SYMPATHETIC INKS.

SYMPATHETIC or secret ink may be defined as 'any liquid with which we may write invisible letters that will not appear until some particular agent is employed to give them colour.' There are several varieties, requiring different treatment—one merely needing exposure to the air; another, to fire; a third, the application of a certain vapour; and so on. Ovid, in his 'Art of Love,' teaches young women to deceive their guardians by writing their love-letters with new milk, and to make the writing appear by rubbing coal-dust over the paper. Any thick and viscous fluid, such as the glutinous and colourless juices of plants, aided by any coloured powder, will answer the purpose equally well. A quill pen should be used. The most common method is to pen an epistle in ordinary ink, interlined with the invisible words, which, doubtless, has given rise to the expression 'reading between the lines' in order to discover the true meaning of a communication.

Letters written with a solution of gold, silver, copper, tin, or mercury dissolved in aqua-fortis, or, simpler still, of iron or lead in vinegar, with water added until the liquor does not stain a white paper, will remain invisible for two or three months if kept shut up in the dark; but, on exposure for some hours to the open air, will gradually acquire colour, or will do so instantly on being held before the fire. Each of these solutions gives its own peculiar colour to the writing: gold, a deep violet; silver, slate; lead and copper, brown; but all possess this common disadvantage—that in time they eat away the paper, leaving the letters in the form of perforations. There is a

vast number of other solutions that become visible on exposure to heat, or on having a heated iron passed over them; the explanation being that the matter is readily burnt to a sort of charcoal, simplest among which we may mention lemon juice or milk; but the one that produces the best result is made by dissolving a scruple of sal-ammoniac in two ounces of water.

Writing with rice-water, to be rendered visible by the application of iodine, was practised successfully in the correspondence with Jelalabad in the first Afghan war. The letter was concealed in a quill. On opening it, a small paper was unfolded, on which appeared the single word 'Iodine.' The magic liquid was applied, and therewith appeared an important despatch from Sir Robert Sale.

In the course of a trial in France last year, a letter was read from a man named Turpin, a chemist, under sentence of five years' imprisonment as a spy, giving directions to a friend with a view to establishing a secret correspondence with him while in prison. This led to an official inquiry on the subject by the French authorities, and some strange revelations were obtained from some of the convicts. It appears that when information has to be conveyed to a prisoner, a formal letter, containing apparently nothing but a few trivial facts of a personal nature, is forwarded to the prison. This is read by the governor, who stamps it, and allows it to be handed on to the man to whom it is addressed. The latter, however, is aware that there is another letter to be read within the lines, this being written in milk, and being easily decipherable on being rubbed over with a dirty finger.

Perhaps the most dangerous of its kind is one that was described in a French scientific journal at the beginning of 1883, at least it might prove so in unscrupulous hands. It consists of an aqueous solution of iodide of starch. In four weeks, characters written with it disappear, preventing all use or abuse of letters, and doing away with all documentary evidence of any kind in the hands of the recipient. But a recent discovery by Professor Braylants of the University of Louvain, surpasses all, inasmuch as no ink at all is required in order to convey a secret message. He lays several sheets of note-paper on each other, and writes on the uppermost with a pencil; then selects one of the under sheets on which no marks of the writing are visible. On exposing this sheet to the vapour of iodine for a few minutes, it turns yellowish, and the writing appears of a violet-brown colour. On further moistening the paper, it turns blue, and the letters show in violet lines. The explanation is that note-paper contains starch, which, under pressure, becomes hydramide, and turns blue in the iodine fumes. It is best to write on a hard desk, say a pane of glass. Sulphurous acid gas can make the writing disappear again, and it can be revived a second time.

By digesting zaffre in aqua regia, by which is obtained the calx of cobalt, we get a secret ink by means of which pretty scenic effects may be produced. It was thus described many years ago by Macquer, known as the author of

the 'Chemical Dictionary.' 'This ink may be applied to the drawing of landscapes, in which the earth and trees destitute of verdure, being drawn with common ink, give a prospect of winter; and which may be made to assume the appearance of spring by exposure to a gentle heat, which covers the trees with leaves and the earth with grass, by rendering visible those parts of the landscapes which are drawn with this sympathetic ink; and as the solution of regulus of cobalt or zaffre in spirit of nitre acquires a reddish colour by the application of heat, the red solution might be contrived to represent the fruits and flowers.'

THE MONTH:

SCIENCE AND ARTS.

THE British Association will meet this year at Oxford in the second week of August, under the Presidency of the Marquis of Salisbury. The Presidents of the various sections have been appointed; and Sir Douglas Galton will be proposed as President for the meeting of 1895, which will take place at Ipswich.

It is said that Mr Edison has completed his 'Kinetoscope,' about which various absurd reports have been current during the past year. This instrument is for the purpose of photographing figures in motion, so that by afterwards combining the pictures in a projection apparatus, the movements are apparently reproduced. This is no more than was done some time ago by Muybridge of California, Anschütz in Germany, and by Marey at Paris. But there may possibly be some novelty in Mr Edison's apparatus which does not at present appear.

Mr G. J. Symons, F.R.S., in the course of a paper which he lately read at the Society of Arts on 'The Rainfall Records of the British Isles,' spoke of a very curious observation which he had made. He said that thirty years ago he had noticed that for many years two rules seemed to have prevailed—(1) That every year ending with the figure 4 had less than the average rainfall, except when that rule was interfered with by another, which was—(2) That every twelfth year back from 1860 had more than the average rain. This rule appears not to have been broken since the year 1812. Mr Symons also pointed out how irregular was the occurrence of rain in the metropolitan district, the rainfall varying from six inches in one particular month to less than half an inch in another. He also alluded to the phenomenal fall of rain on June 23, 1878, when three and a quarter inches fell on London in one hour and a half, a fall which would mean three hundred and thirty tons' weight of water on every acre of ground. In conclusion, the lecturer spoke of the large army of unpaid workers who are now engaged in making rainfall records all over the country.

On the 5th of March last a brilliant meteor was seen by various observers in different parts

of England. The luminous body must have been of vast size and great brilliance, for it was observed in bright sunlight. It is described as moving from a north-westerly direction, and as having the appearance of a second-magnitude star.

Shuman's process of embedding wire in glass so as to form large sheets of transparent material for the glazing of hothouses and the like, has recently been brought to great perfection at the works of the American Wire-glass Manufacturing Company at Tacony, Philadelphia. The idea of associating wire with glass is by no means new, as many a specification in the English Patent Office will testify; but there are points in the Shuman process which get over difficulties which no previous inventor was able to surmount. The method adopted is briefly as follows: Molten glass is poured upon a heated cast-iron table, and is rolled, to a thickness previously determined upon, by a heated metal roller. A sheet of wire network of the same size—also heated—is now brought upon the surface of the molten glass, and a ribbed roller passes over it so as to imbed it in the plastic mass. A smooth roller now removes the furrows caused by the previous one, and the result is a sheet of transparent glass supported by an inner metallic skeleton. A few hours in an annealing oven completes the process of manufacture.

A correspondent of the *Times of India* points out that the burrowing wasp if watched at work will furnish a sight quite as full of hints for the sluggard as the busy bee or the industrious ant. Watching one of these intelligent insects, he saw it dig a hole in the soft earth much as a terrier will accomplish the same work, but with a more definite object in view. Having made the hole to its apparent satisfaction, it went away to a little distance, and dragged to the grave the body of a large spider, which it had evidently killed previously. The corpse of the spider was thrust into the hole; and after being treated to a few stings, to make sure that it was dead in earnest, the wasp carefully restored the earth to its place, and ran several times backward and forward over the newly-made grave, with the apparent intention of obliterating all trace of its work, so that no marauder should steal the delicacy buried below.

So many are interested in the use of oil-fuel for heating steam-boilers, that a few particulars relative to its employment in lieu of coal at the Chicago Exhibition will not be out of place. During the time for which the Exhibition remained open there were used between ten and eleven million gallons of oil, which was supplied by contract at about three-farthings per gallon. The boiler-house comprised two hundred and ten burners, which atomised the oil beneath fifty-two huge boilers, and required the attendance of forty-two men. To produce the same amount of energy by means of solid fuel, between five hundred and six hundred tons of coal per day would have been required, or seventy thousand tons in all. It has been pointed out in a recent Report upon the subject, that this vast amount of coal could not have been handled expeditiously in the limited

space available except with great danger to life and property. The saving by the use of oil-fuel instead of coal is calculated to have been about twenty-seven per cent.; the engines worked from start to finish without a break, and the smokelessness and absence of odour was a matter of common remark.

A curious question came before the law-courts the other day, when an inventor was sued by an engineer for the price of certain work upon a machine which would not work. The engineer pleaded that he never guaranteed that it would work, for it was a machine for producing perpetual motion. In the course of the proceedings it was stated that there were several thousand inventors engaged in attempting to solve this old problem. An extremely curious circumstance, if we reflect that half an hour's study of the modern doctrine of conservation of energy would demonstrate its impossibility to any reasonable mind. History repeats itself, and the search for the philosopher's stone which ruined so many enthusiastic workers in medieval times is with us still under another name.

A very curious natural provision for the protection of certain trees growing along the swampy southern portion of the Ganges delta, is described in an interesting article in the 'Journal' of the Royal Asiatic Society of Bengal under the title of 'The Blind Root-suckers of the Sunderbans.' Many of the trees of this locality are furnished with these root-suckers, which take the form of woody processes proceeding from the whole length of the roots, and growing in an upward direction, they grow until they reach the highest level of the tides, and thus form a kind of network around the tree stems, and so protect them from being uprooted in the most violent wind. These root-suckers never produce buds, and are furnished with air-chambers for the aeration of the roots.

Professor Redwood, and Mr Topley, the Government geologist, have reported upon the recent discovery of petroleum on the Ashwick estate, Somerset. They believe that the oil exists in sufficient quantity to warrant further expenditure in boring; and at their suggestion, a few charges of a high explosive were fired in the well, in order to liberate the oil from the contiguous rock. This had the desired effect, and the water came up thickly coated with oil. The oil seems to be of good colour and quality generally, having the odour of refined rather than crude petroleum. It has a very high flashing-point.

A prize worth about one thousand pounds sterling is offered by a Russian Count for an efficient means of protecting from, or the curing of horned beasts suffering from cattle disease, the prize to be awarded by the Curator of the Imperial Institute of Experimental Medicine at St Petersburg, with the help of a Committee of experts. The competition is open to the world, members of the above-named Institute only being ineligible; and a description of the remedy must be sent in before the 1st of January 1897. In order to give time to test the efficacy of the remedies proposed, the award will not be made until two years have elapsed from the above date.

A very interesting paper on 'Forging by Hydraulic Pressure' was lately read before the Institution of Civil Engineers by Mr R. H. Tweddell. After giving a brief history of the development of the process since the year 1846, when the proposal was first made to work hot or cold iron under the Bramah press, the author pointed out the advantages of the hydraulic press over the steam hammer. He showed that the power of the former was practically all exerted upon the forging under treatment, and not dissipated in shocks to framing and foundation, quoting the axiom that noise and waste of energy were convertible terms. More work, he asserted, could be turned out by the press than by the hammer in a given time; while dies were uninjured, and some were employed that could never be used under the hammer. The effect of the latter was momentary; but with the hydraulic press the same rate of working per hour could be maintained; and the effect of the continued pressure was to increase the homogeneity of the forgings under treatment.

The 'Photoret' is an apparatus formed like a watch, and is perhaps a trifle larger both in diameter and thickness than the railway time-keeper carried by guards and engine-drivers. But its duty is not to mark the flight of time, but to take photographs. This is brought about by a simple slot movement to change the position of a circular film of sensitised celluloid inside the apparatus; and pressure upon the knob of the handle gives a rapid exposure while the Photoret is held in the hand. Six exposures can be made on one film, each little picture being about half an inch square, but capable of after-magnification. The ingenious device emanates from a New York firm, for whom the London agents are Messrs Brigham & Sheldon, 102 Fore Street, E.C.

London's 'Eiffel' Tower, which, when complete, is to be one hundred and fifty feet higher than its Parisian prototype, is now complete to its first stage, and it is already a notable object, which can be seen from many miles around Wembley, which, by the way, is not far from Willesden Junction. There are two hundred men employed upon the work, which has occupied nine months of the two years allowed for the completion of the Tower. The total height of the erection will be 1150 feet, or about three times the height of St Paul's Cathedral, and its weight is estimated at 7500 tons.

An ingenious manner of obtaining a photograph of the gorilla without too close an approach to that ferocious animal, was lately described to an interviewer by Professor Garner. The Professor set his camera in a likely locality, and focused it upon a bait in front, which, by means of a string, was attached to the instantaneous shutter of the instrument. The gorilla in seizing the bait could not fail to pull the string and have his likeness taken.

We trust, now that it is shown how a little money may be wisely spent in directing attention to improvement in common things, that others will come forward with their purses open in a like manner to tempt inventors to seriously review some other outlets for their ingenuity. Cannot, for instance, some improvement be made in the design of the common

suburban villa?—we mean those houses which are tenanted mostly by the superior artisan class, and are built in rows which are hideous in their regularity, and an eyesore to the landscape. Into the details of these and other houses we dare not venture, for they are so full of things open to improvement. They want windows which will not rattle, door-knobs which will not come off, walls which will hold a nail, and cement which will not peel. These are a few of the things which are, like the London cabs, decidedly open to improvements.

Some years ago, in a then popular novel, a scheme was jokingly described for collecting sawdust and compressing its particles once more into solid wood. What was stated in joke then, has become a reality now, in the product known as Xylolith, or wood-stone, which is being manufactured on an extensive scale by Messrs Otto Sening & Company of Pottschappel, near Dresden. The material is made by mixing sawdust with magnesia cement, or calcined magnesite, saturating the compound with a solution of chloride of calcium, and finally subjecting it to a pressure of one thousand pounds to the square inch. After drying in the air, the sheets into which the pasty mass has been compressed can be sawn, planed, or otherwise dealt with by ordinary wood-working tools. Xylolith is very hard, unflammable, can easily be rendered waterproof by paint, is amenable to any kind of decoration, and is so useful in various ways, that it is coming into extensive employment for many purposes.

A tramway company at St Louis, United States, America, are adopting an air-brake on their cars much of the same pattern as that in use on our railways. But in the absence of steam as the compressing force, the pump is worked by the revolution of the wheel axle. In running a distance of two hundred feet, the maximum pressure of forty pounds to the inch can be easily obtained.

In a recent lecture by Professor Miall, F.R.S., of the Yorkshire College, Leeds, a somewhat unfamiliar subject was broached in the consideration of life on the surface of water. Such a situation afforded certain special advantages to that class of plants able to occupy such a position, and these were principally free access to air and sunlight, for from such sources plants derived an important part of their nourishment. But against these advantages was the danger of overcrowding, for it was obvious that the surface of water, having no depth, was limited in its accommodation. As a typical instance of the tendency to overcrowd in the case of large-leaved plants, the huge water-lily, the 'Victoria regia,' was named. A leaf of this plant would support the weight of a man, and when crowded by its neighbours, it shot out a rim, and thus defended itself from overlapping. The leaf was riddled with what might be called pin-holes, so that rain could not accumulate on its surface.

The Board of Trade Report for 1893 on the working of the Explosion of Boilers Act has recently been published, and it shows that a goodly number of the accidents reported upon are preventable. A large proportion of

the explosions of boilers used for heating purposes take place in frosty weather, and are directly attributable to faulty fittings of the domestic hot and cold water supply.

SOMETHING ABOUT LEAF-MINERS.

WHILE the glory of autumn colours gratifies our sense of the beautiful, another aspect of the leaves appeals to our interest and curiosity. The great army of Leaf-miners which produce the effects alluded to may be looked upon as a connecting link between the numerous insects which feed outside the leaves and those which require the plant to provide them a special food and shelter, like the gall-flies. For while they do not, like these latter, cause any abnormal growth on the plant, they yet feed and lodge *within* the leaf. The adult insect is a fly which pierces the skin—botanically, the epidermis—of the leaf and lays an egg beneath. When the grub is hatched, it does not, like that of the gall-fly, cause a special growth round itself; it merely eats away the green substance of the leaf lying between the epidermis and the veins. It thus forms a little dwelling for itself, sheltered from the weather with a roof formed by the leaf-skin. This eating away of the leaf shows itself externally as brown, greenish white, or white patches, and markings of various shapes. As the grubs are hatched and at work during the summer, the markings on the leaves begin to make themselves conspicuous in the autumn.

Looking round the garden, we note rather large brown patches on many of the leaves of the lilac tree. These are not merely touches of the general autumnal decay, as might be supposed at first, but the result of the work of a species of leaf-miner. Lift up carefully the brown shrivelled skin, and you see—ah, no; there is nothing there! Try another. In this there is a small caterpillar, with its head towards the outside of the eaten-out patch. It is busy eating—the one object of its life. The little tomtit knows all about these inhabitants of the lilac leaves, and one of the interesting sights of autumn is to see him hunting for them. There he is, clinging by his feet to the very end of a leaf, engaged in eager search. If there is a caterpillar in that leaf, its chances of escape are small. Perhaps Mr Tomtit had been at that one we found empty, or perhaps the caterpillar had left the leaf itself; for at times they may be seen hanging by their silken threads from the leaves, evidently descending to the ground. Hence it is to be supposed these leaf-miners do not, as some others do, pass their chrysalis stage within the leaf.

On the leaves of the raspbush the work of the leaf-miners shows as light whitish green patches. Holding them up to the light, a light-coloured caterpillar with a dark head is seen. Its head is at the circumference of its eaten-out dwelling.

On other leaves the work of the leaf-miner shows itself in a more picturesque fashion. Irregularly winding, narrow tunnels, gradually increasing in breadth, show themselves on the surface, something like the mapping of very

meandering rivers. These caterpillars have eaten out tunnels of which the increasing widths correspond with their increasing appetites. Sometimes the course of the tunnel turns round and crosses itself—in this unlike a river. Such tunnels are abundant on the leaves of the snowberry, and may be seen also on those of the primrose, columbine, and other plants. By the roadside they occur frequently on the cow-parsnip and honeysuckle. The grub is found at the end of the tunnel on lifting the epidermis, unless it happens to have left the leaf.

Certain leaf-miners emerge from the leaves as perfect insects, leaving behind them their chrysalis robes as evidence. On this leaf of alder, for example, the space between two of the parallel veins on the under side of the leaf is occupied by a brown patch where the leaf-substance has been eaten out. At the end of the old caterpillar dwelling, the empty chrysalis case is standing at right angles to the leaf. The white patches which mark the insects' work on the oak-leaves have each a dark body in the centre. On examination, they are seen to be empty chrysalis cases. When we remember the various abnormal growths produced on the oak by gall-flies laying their eggs on it, the fact that the eggs and young of the leaf-miners produce no such effect is not a little strange; for on the very same leaf as the white patch of the leaf-miner, with the black chrysalis robe in the centre, are several little round galls.

Certain leaf-miners in their tracings on the leaf form a transition between the tunnel and patch producers. A narrow tunnel winds about for a short distance, and then spreads out into a patch. They may be compared to short rivers expanding into lakes; and as a lake may have several streams feeding it, so many of these patches have more than one tunnel leading to them. Here are some good examples on the leaves gathered from a young laburnum tree in the garden. The beginning of each little river is marked by a brown spot. Sometimes the lake has expanded so as to obliterate its river. The brown spots mark where the eggs were laid, and where the caterpillars began to eat themselves dwelling-places in the leaf. When we see more than one tunnel leading to a patch, we infer there has been more than one caterpillar at work forming it; and on removing the epidermis, we find two or more caterpillars sharing a common dwelling. Sometimes so many caterpillars have been at work that little of the leaf remains intact. This is the case with one of our laburnum leaves. The tunnels are all obliterated, though the brown spots where each caterpillar commenced work are still discernible.

Such are the means by which the leaf-miner obtains board and lodging in one. A strikingly convenient and economical arrangement. With man, the possession of a noble appetite is not exactly conducive to the enlargement of his dwelling; but the more the leaf-miner eats the more spacious becomes his abode. He cannot 'eat himself out of house and home,' but rather eats out a house for himself. His diet is perhaps monotonous, and he is perforce always confined to the house; yet these are but trifling drawbacks to a happy state where eating, instead of tending to poverty, only serves to enlarge his borders.

In the above remarks we have merely skirted the fringes of a large subject. The number of leaf-miners is legion; and it is a branch of entomology much less completely worked out than are butterflies and beetles. Hence, there is so much the more scope for the young entomologist who wishes to win his spurs and cover himself with the glories of original discovery.

WINTER'S GONE.

COME with me, my Phyllis dear,
Where the linnet's loudly singing;
See, the skies are bright and clear,
And the woods with joy are ringing.
Everything is glad and gay,
Now that winter's passed away.

Bring your hat; but twine it round
With a spray of April roses,
While I pluck from sheltered ground
Early flowers most meet for posies.
Then, indeed, you 'll look like one
That lives in love of sky and sun.

Many a day I've watched them spring,
Snowdrop white and primrose yellow,
Violet, shyly blossoming,
And the crocus, gorgeous fellow;
But this morning forth they came
To do full honour to your name.

How the linnets pipe and trill!
Well they know that winter's over.
Yonder, 'neath the copse-crowned hill,
Cattle crop the bursting clover;
While the ploughboy, full of mirth,
Sings to see the smiling earth.

Here are lambs, not three days old,
Nestling 'gainst the patient mother;
Here are others, grown more bold,
Gambolling with one another;
Fearing neither shower nor storm
While the sunlight's bright and warm

Come with me, my Phyllis dear,
Where the woods with joy are ringing,
Where the skies are warm and clear,
And the earth to life is springing.
What care we for work to-day?
Is not winter passed away?

J. S. FLETCHER.

*• TO CONTRIBUTORS.

- 1st. All communications should be addressed to the 'Editor, 339 High Street, Edinburgh.'
 - 2d. For its return in case of ineligibility, postage-stamps should accompany every manuscript.
 - 3d. To secure their safe return if ineligible, ALL MANUSCRIPTS, whether accompanied by a letter of advice or otherwise, should have the *writer's Name and Address written upon them IN FULL.*
 - 4th. Poetical contributions should invariably be accompanied by a stamped and directed envelope.
- If the above rules are complied with, the Editor will do his best to ensure the safe return of ineligible papers.*

Printed and Published by W. & R. CHAMBERS, Limited,
47 Paternoster Row, LONDON; and EDINBURGH.